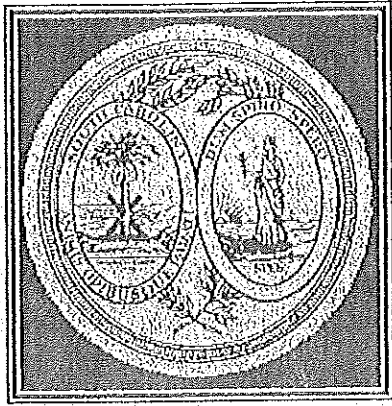


PUBLIC SERVICE  
COMMISSION



of  
SOUTH CAROLINA

COMMISSION  
STAFF  
REPORT

**Duke Power Company**

Docket No. 2002-3-E

Adjustment of Base Rates  
For Fuel Costs

April 2001 – March 2002 (Actual)

(April 2002 and May 2002 Estimated)

**THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA**

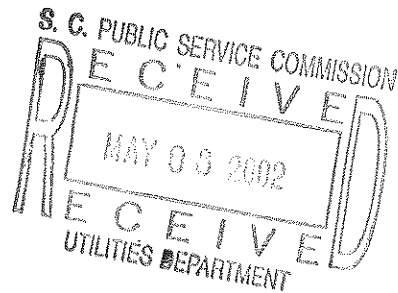
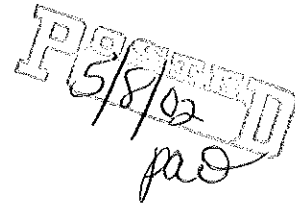
**STAFF REPORT**

**Of the**

**AUDIT DEPARTMENT**

**And**

**UTILITIES DEPARTMENT**



**DOCKET NO. 2002-3-E**

**DUKE POWER COMPANY**

**REPORT OF THE AUDIT DEPARTMENT**  
**THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA**

**DOCKET NO. 2002-3-E**  
**DUKE POWER COMPANY**

**REPORT OF THE AUDIT DEPARTMENT**  
**THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA**  
**DOCKET NO. 2002-3-E**  
**DUKE POWER COMPANY**

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## **REPORT OF THE AUDIT DEPARTMENT**

**DOCKET NO. 2002-3-E**

**DUKE POWER COMPANY**

### **ANALYSIS**

The Audit Department Staff has made a study of the books and records of Duke Power Company, Charlotte, North Carolina, relative to the Commission's requirement under Docket No. 2002-3-E, that periodic hearings be conducted before the Commission concerning the Adjustment of Base Rates for Fuel Costs.

### **CURRENT REVIEW PERIOD**

The current investigation of Duke Power Company's Retail Fuel Adjustment Clause covers the period June 2001 through May 2002. Since the fuel hearing is scheduled for May 2002, Staff's audit covered through the month of March 2002, with the months of April and May 2002 estimated. In the last fuel hearing, fuel figures for April and May 2001 were estimated, therefore, Staff reviewed Duke's books and records for the period April 1, 2001 through March 31, 2002. The under-recovery amount for April 2002 and the under-recovery amount for May 2002 were estimated for the purpose of adjusting base rates effective June 1, 2002. The April and May 2002 estimates will be trued-up at Duke's next hearing after the costs are examined.

### **SCOPE OF STUDY**

The Commission's Audit Department's examination consisted of the following:

1. Analysis of Fuel Stock - Account # 151

(Net) amount used in the Fuel Adjustment Clause.

Staff obtained the details of purchases and sales made by Duke from and to other electric utilities. Staff verified all individual transactions of purchased and interchanged power to source documents. Staff verified amounts that are being used in computing total fuel costs for each month. These details allowed the Staff to identify fuel costs that were being passed through the clause in computing the factor above or below the base for each period.

### **VERIFICATION OF KWH SALES**

The Audit Department Staff reconciled the KWH sales as reported to the Commission through monthly fuel adjustment filings to the Company's monthly Financial and Operating Reports.

### **COMPARISON OF COAL COSTS**

Staff prepared exhibits from Duke's books and records reflecting coal costs during the review period. Specifically, these exhibits are as follows:

#### **Exhibit A - Coal Cost Statistics**

#### **Exhibit B - Received Coal-Cost Per Ton Comparison**

With reference to Exhibit A, Coal Cost Statistics, Staff has shown a detailed analysis of spot and contract coal for the twelve (12) - month period April 2001 through March 2002. The detail gives emphasis to tons purchased, percentage of tons purchased, cost per ton delivered, total delivered cost, and cost per MBTU.

In Exhibit B, Received Coal-Cost Per Ton Comparison, Staff reflects the overall cost per ton of coal by month for the three major electric utilities regulated by this Commission.

## **ANALYSIS OF SPOT COAL PURCHASING PROCEDURES**

The Audit Staff examined the procedure followed by the Company's Fuel Purchasing Department for obtaining and accepting offers on spot coal. To achieve this, Staff chose two months of the audit period that had received large amounts of spot coal. Staff examined spot coal proposals received in the months of May 2001 and November 2001.

The Fuel Purchasing Department maintains a list of coal vendors from whom proposals are received monthly. These coal vendors send their proposals to Duke via Spot Coal Sales Proposal Data Sheets, with each proposal or offer on a separate sheet.

If the Company decides to purchase spot coal in a given month, then the proposals are evaluated. For evaluation purposes, the spot coal sales proposals are compiled on an Evaluation of Spot Bids computer run and are ranked by the cost per MBTU. The purchasing agents consider at least three factors when they agree to the spot coal offers: (a) the price per ton (including freight), (b) the BTU, ash, and sulfur content of the coal offered, and (c) the past experience with the supplier and the coal obtained from the producer. The Company's purchasing agents determine the current market price for spot coal prior to negotiating with the coal vendors. In this way, the agents determine the limits they should stay within when bargaining for coal. The agents bargain over the price of the coal, and either accept (the original offer or a counter offer) or reject the coal vendor's offer.

Upon acceptance of an offer, the Fuel Purchasing Department prepares a purchase order, a copy of which is mailed to the coal vendor. When the coal is received at the plant, the Company analyzes the coal for BTU, ash, and sulfur content and prepares a coal analysis report which is sent to the Fuel Purchasing Department. The Fuel Purchasing Department determines

the appropriate premium or penalty on the coal, and the results are forwarded to the Company's Accounting Section, which in turn, adds a premium or assesses a penalty to the total amount due to the coal vendor.

The Fuel Purchasing Department closely monitors the quality of coal shipped by the various producers. If a certain producer renders poor performance, the purchasing agent records it and considers this when analyzing any future offers from the supplier.

As mentioned previously, Staff examined spot coal offers received for the months of May 2001 and November 2001. Staff obtained the Company's Evaluation of Spot Bids computer runs for the aforementioned months. The Evaluation of Spot Bids run is listed alphabetically by plant, with each plant's spot coal offers ranked by cost per MBTU. Also included on the Evaluation of Spot Bids run is the name of the coal company, the name of the producer, number of tons offered, coal specifications, the number of tons purchased, the plant to which the coal was shipped, or a reason for rejecting the offer.

During May 2001, 8 offers were submitted (per offer sheets) and Duke accepted 12 orders (several plant orders per offer sheet). During November 2001, 11 offers were submitted (per offer sheets) and Duke accepted 7 orders.

#### **RECOMPUTATION OF TRUE-UP FOR (OVER) UNDER-RECOVERED FUEL COSTS**

Staff analyzed the cumulative over-recovery of fuel costs that the Company had incurred for the period April 1, 2001 through March 31, 2002 totaling \$7,446,417. Staff added the projected under-recovery of \$405,518 for the month of April 2002 and the projected under-recovery of \$2,823,060 for May 2002 to arrive at a cumulative over-recovery of \$4,217,839. The Company's cumulative over-recovery as of March 2002 and cumulative over-

recovery as of May 2002 differs from Staff's. Staff's Purchased Power figures for June 2001 and October 2001 differ from the Company's figures (November 2001 also slightly differed, but when compared on a rounded basis, there was no difference to note). Staff's figures, per Staff's report, reflect calculation adjustments made to Purchased Power Costs for the aforementioned months, based on Staff's review of Purchased Power system operations reports and invoices. Staff's Exhibit G, S.C. Retail Comparison of Fuel Revenues and Expenses, which consist of two pages, provides details of Staff's cumulative over-recovery balance.

As stated in Duke Power Company's Adjustment for Fuel Costs, fuel costs will be included in base rates to the extent determined reasonable and proper by the Commission. Accordingly, the Commission should consider the over-recovery of \$4,217,839 along with the anticipated fuel costs for the period June 1, 2002 to May 31, 2003, for the purpose of determining the base cost of fuel in rates effective June 1, 2002.

This over-recovery figure of \$4,217,839 was provided to the Commission's Utilities Department.

## **RESULTS OF EXAMINATION**

Based on the Audit Staff's examination of Duke Power Company's books and records, and the utilization of the fuel cost-recovery mechanism as directed by this Commission, the Audit Staff is of the opinion that the Company has complied with the directives (per the Fuel Adjustment Clause) of the Commission.

## **EXHIBITS**

Exhibits relative to this report are identified as follows:

### **EXHIBIT A: COAL COST STATISTICS**

In Exhibit A, Coal Cost Statistics, Staff compares spot, contract and total coal received for the months of April 2001 through March 2002. The comparison is made in the following areas:

1. Tons Purchased
2. Percentage of Total Tons Purchased
3. Received Cost Per Ton
4. Total Received Cost
5. Cost Per MBTU

### **EXHIBIT B: RECEIVED COAL-COST PER TON COMPARISON**

In Exhibit B, Staff has shown for comparison purposes, the freight cost per ton, mine cost per ton, the total cost per ton, and the cost per MBTU of received coal for Duke Power Company, Carolina Power & Light Company, and South Carolina Electric & Gas Company. The costs per ton shown for the period April 2001 through March 2002 included both spot and contract purchases, and were extracted from required filings for Carolina Power & Light Company, South Carolina Electric & Gas Company, and from Duke Power Company.

### **EXHIBIT C: DETAIL OF NUCLEAR COST**

In Exhibit C, Staff has shown in detail, the two components in total nuclear costs. These components are as follows:

1. Burn-up Cost
2. Disposal Cost

## **EXHIBIT D: TOTAL BURNED COST (FOSSIL AND NUCLEAR)**

This exhibit reflects the dollar amounts of burned costs, including emission allowance expenses, and the percentage of the Total Burned Costs for fossil and nuclear fuel by months from April 2001 through March 2002.

## **EXHIBIT E: COST OF FUEL**

In Exhibit E, Staff has computed the total fuel cost applicable to the factor computation. There are three (3) components used in arriving at this cost. Those components are as follows:

1. Cost of Fuel Burned...This amount is the burned cost of all fossil and nuclear fuel during the period. A detailed breakdown between coal (including emission allowance expenses), oil, gas and nuclear fuel can be seen in Exhibit D.

2. Purchase and Interchange Power Fuel Cost... This amount is the monthly KWH's delivered to or received by one electric utility system (and/or power marketer) from another.

3. Fuel Cost Recovered through Intersystem Sales... This amount is the fuel-related cost on KWH's sold during the period to Yadkin, Inc., other electric utilities and /or power marketers.

Total fuel cost applicable to the factor is computed by adding the cost of fuel burned to purchased power and interchange power fuel cost. This amount is then reduced by fuel associated with intersystem sales.

## **EXHIBIT F: FACTOR COMPUTATION**

Staff has computed the Fuel Cost Adjustment Factor by month beginning with April 2001 and going through March 2002. In computing this factor, total fuel cost applicable to the Fuel

Adjustment Clause is divided by total system sales, excluding intersystem sales. This results in fuel cost per KWH. The fuel cost per KWH is then compared to the base cost per KWH as ordered by the Commission. This variance is reflected as the monthly fuel cost adjustment factor.

#### **EXHIBIT G: S.C. RETAIL COMPARISON OF FUEL REVENUES AND EXPENSES**

Shown in this exhibit is the computation of the cumulative over-recovery at May 31, 2002.

**DUKE POWER COMPANY  
COAL COST STATISTICS  
APRIL 2001 - MARCH 2002**

AUDIT EXHIBIT A

**SPOT**

<u>MONTH</u>	<u>TONS RECEIVED</u>	<u>PERCENTAGE</u>	<u>COST/TON RECEIVED</u>	<u>TOTAL RECEIVED COST</u>	<u>\$/MBTU</u>
	<u>TONS</u>	<u>%</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
Apr-01	547,095.85	33.48%	43.78	23,950,950.76	1.7830
May-01	503,696.05	31.00%	45.09	22,712,183.85	1.8311
Jun-01	449,154.70	31.27%	43.46	19,518,704.21	1.7658
Jul-01	514,463.80	34.79%	53.22	27,382,177.60	2.1881
Aug-01	425,397.05	28.75%	49.57	21,087,017.88	2.0346
Sep-01	519,858.15	32.01%	56.16	29,196,211.36	2.2969
Oct-01	448,995.85	29.13%	51.12	22,951,287.85	2.0828
Nov-01	474,708.75	27.75%	45.67	21,681,078.99	1.8505
Dec-01	347,422.75	22.67%	48.40	16,815,988.66	1.9954
Jan-02	106,845.25	9.04%	44.55	4,759,783.95	1.8160
Feb-02	59,235.35	4.82%	50.27	2,977,583.05	2.0008
Mar-02	30,845.00	2.55%	46.86	141,100.91	1.9283
Totals (4/01 - 3/02)	4,427,718.55			213,174,069.07	

**CONTRACT**

<u>MONTH</u>	<u>TONS RECEIVED</u>	<u>PERCENTAGE</u>	<u>COST/TON RECEIVED</u>	<u>TOTAL RECEIVED COST</u>	<u>\$/MBTU</u>
	<u>TONS</u>	<u>%</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
Apr-01	1,086,995.80	66.52%	35.68	38,778,693.52	1.4427
May-01	1,120,919.20	69.00%	35.81	40,143,985.53	1.4497
Jun-01	987,159.75	68.73%	37.97	37,478,560.92	1.5493
Jul-01	964,308.95	65.21%	37.28	35,947,509.82	1.5328
Aug-01	1,054,121.45	71.25%	36.36	38,328,748.97	1.4929
Sep-01	1,103,961.30	67.99%	36.09	39,845,917.73	1.4857
Oct-01	1,092,243.35	70.87%	35.81	39,110,405.03	1.4754
Nov-01	1,236,155.20	72.25%	35.56	43,963,274.10	1.4544
Dec-01	1,184,922.25	77.33%	35.26	41,774,707.28	1.4512
Jan-02	1,075,445.60	90.96%	41.30	44,416,324.05	1.6894
Feb-02	1,223,289.00	95.38%	41.43	50,686,713.21	1.6752
Mar-02	1,180,582.10	97.45%	40.40	47,700,148.59	1.6469
Totals (4/01 - 3/02)	13,310,103.95			498,174,988.75	

**COMBINED**

<u>MONTH</u>	<u>TONS RECEIVED</u>	<u>PERCENTAGE</u>	<u>COST/TON RECEIVED</u>	<u>TOTAL RECEIVED COST</u>	<u>\$/MBTU</u>
	<u>TONS</u>	<u>%</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
Apr-01	1,634,091.65	100.00%	38.39	62,729,644.28	1.5561
May-01	1,624,615.25	100.00%	38.69	62,856,169.38	1.5677
Jun-01	1,436,314.45	100.00%	39.68	56,997,265.13	1.6172
Jul-01	1,478,772.75	100.00%	42.83	63,329,687.42	1.7608
Aug-01	1,479,518.50	100.00%	40.16	59,415,766.85	1.6480
Sep-01	1,623,819.45	100.00%	42.52	69,042,129.09	1.7465
Oct-01	1,541,239.20	100.00%	40.27	62,061,692.88	1.6537
Nov-01	1,710,863.95	100.00%	38.37	65,644,353.09	1.5650
Dec-01	1,532,345.00	100.00%	38.24	58,590,695.94	1.5727
Jan-02	1,182,290.85	100.00%	41.59	49,176,108.00	1.7014
Feb-02	1,282,524.35	100.00%	41.84	53,664,296.26	1.6918
Mar-02	1,211,427.10	100.00%	39.49	47,841,249.50	1.6040
Totals (4/01 - 3/02)	17,737,822.50			711,349,057.82	

DUKE POWER COMPANY  
RECEIVED COAL-COST PER TON COMPARISON  
APRIL 2001 - MARCH 2002

DUKE POWER COMPANY				
MONTH	<u>INVOICE</u>	<u>FREIGHT</u>	<u>TOTAL</u>	<u>COST PER</u>
	<u>COST PER</u>	<u>COST PER</u>	<u>COST PER</u>	
	<u>TON</u>	<u>TON</u>	<u>TON</u>	
	\$	\$	\$	\$
Apr-01	28.01	10.38	38.39	1.5561
May-01	28.20	10.49	38.69	1.5677
Jun-01	29.00	10.68	39.68	1.6172
Jul-01	32.31	10.52	42.83	1.7608
Aug-01	29.77	10.39	40.16	1.6480
Sep-01	32.14	10.38	42.52	1.7465
Oct-01	29.54	10.73	40.27	1.6537
Nov-01	28.05	10.32	38.37	1.5650
Dec-01	27.95	10.29	38.24	1.5727
Jan-02	27.03	14.56	41.59	1.7014
Feb-02	26.27	15.57	41.84	1.6918
Mar-02	24.99	14.50	39.49	1.6040

CAROLINA POWER & LIGHT COMPANY				
MONTH	<u>INVOICE</u>	<u>FREIGHT</u>	<u>TOTAL</u>	<u>COST PER</u>
	<u>COST PER</u>	<u>COST PER</u>	<u>COST PER</u>	
	<u>TON</u>	<u>TON</u>	<u>TON</u>	
	\$	\$	\$	\$
Apr-01	31.83	11.82	43.65	1.7541
May-01	30.91	11.65	42.56	1.7160
Jun-01	30.74	11.74	42.48	1.7168
Jul-01	32.73	11.66	44.39	1.7839
Aug-01	32.47	11.90	44.37	1.7978
Sep-01	31.83	11.93	43.76	1.7731
Oct-01	32.39	11.76	44.15	1.7799
Nov-01	31.94	11.68	43.62	1.7600
Dec-01	33.39	11.65	45.04	1.8082
Jan-02	32.83	11.33	44.16	1.7911
Feb-02	34.77	11.37	46.14	1.8411
Mar-02	33.58	11.45	45.03	1.8282

SOUTH CAROLINA ELECTRIC & GAS COMPANY				
MONTH	<u>INVOICE</u>	<u>FREIGHT</u>	<u>TOTAL</u>	<u>COST PER</u>
	<u>COST PER</u>	<u>COST PER</u>	<u>COST PER</u>	
	<u>TON</u>	<u>TON</u>	<u>TON</u>	
	\$	\$	\$	\$
Apr-01	25.87	12.43	38.30	1.5031
May-01	27.26	12.17	39.43	1.5405
Jun-01	27.61	12.93	40.54	1.5919
Jul-01	27.42	12.59	40.01	1.5712
Aug-01	27.31	12.53	39.84	1.5738
Sep-01	27.56	12.79	40.35	1.5986
Oct-01	28.65	12.30	40.95	1.6259
Nov-01	29.89	12.51	42.40	1.6827
Dec-01	30.04	11.99	42.03	1.6612
Jan-02	30.08	12.43	42.51	1.6851
Feb-02	30.24	12.35	42.59	1.6652
Mar-02	29.89	12.00	41.89	1.6391

AUDIT EXHIBIT C

DUKE POWER COMPANY  
DETAIL OF NUCLEAR COST  
APRIL 2001 - MARCH 2002

MONTH	BURN-UP COST	DISPOSAL COST	TOTAL NUCLEAR COST
	\$	\$	\$
Apr-01	8,141,065	2,458,270	10,599,335
May-01	9,972,734	2,933,131	12,905,865
Jun-01	11,511,850	3,447,452	14,959,302
Jul-01	12,146,969	3,459,357	15,606,326
Aug-01	12,518,699	3,515,909	16,034,608
Sep-01	10,721,350	3,198,089	13,919,439
Oct-01	11,583,810	3,481,538	15,065,348
Nov-01	10,332,241	3,073,540	13,405,781
Dec-01	10,754,783	3,276,756	14,031,539
Jan-02	11,693,553	3,620,665	15,314,218
Feb-02	10,295,477	3,103,806	13,399,283
Mar-02	8,670,977	2,616,740	11,287,717
Total	128,343,508	38,185,253	166,528,761

AUDIT EXHIBIT D

DUKE POWER COMPANY  
TOTAL BURNED COST (FOSSIL AND NUCLEAR)  
APRIL 2001 - MARCH 2002

<u>MONTH</u>	<u>COAL (1)</u> \$	<u>PERCENT</u> %	<u>OIL</u> \$	<u>PERCENT</u> %	<u>GAS</u> \$	<u>PERCENT</u> %	<u>NUCLEAR</u> \$	<u>PERCENT</u> %	<u>TOTAL BURNED COST</u> \$
Apr-01	48,603,305	77.21%	3,193,307	5.07%	551,780	0.88%	10,599,335	16.84%	62,947,727
May-01	50,262,356	77.39%	702,480	1.08%	1,080,477	1.66%	12,905,865	19.87%	64,951,178
Jun-01	57,275,769	79.62%	572,863	0.80%	(869,289)	(1.21%)	14,959,302	20.79%	71,938,645
Jul-01	66,118,342	79.68%	714,807	0.86%	536,059	0.65%	15,606,326	18.81%	82,975,534
Aug-01	75,838,179	80.69%	519,386	0.56%	1,591,256	1.69%	16,034,608	17.06%	93,983,429
Sep-01	55,817,565	79.18%	533,454	0.76%	218,371	0.31%	13,919,439	19.75%	70,488,829
Oct-01	48,184,856	75.50%	495,722	0.78%	73,069	0.11%	15,065,348	23.61%	63,818,995
Nov-01	39,964,410	74.16%	445,395	0.83%	70,881	0.13%	13,405,781	24.88%	53,886,467
Dec-01	42,615,457	74.79%	409,369	0.72%	(72,566)	(.13%)	14,031,539	24.62%	56,983,799
Jan-02	46,657,712	74.72%	454,059	0.73%	16,255	0.03%	15,314,218	24.52%	62,442,244
Feb-02	41,635,221	74.68%	714,197	1.28%	1,549	0.00%	13,399,283	24.04%	55,750,250
Mar-02	55,318,592	81.00%	1,690,639	2.47%	1,720	0.00%	11,287,717	16.53%	68,298,668

(1) Includes Emission Allowance Expense

AUDIT EXHIBIT E

DUKE POWER COMPANY  
COST OF FUEL  
APRIL 2001 - MARCH 2002

<u>MONTH</u>	<u>TOTAL COST OF FUEL BURNED</u>	<u>PURCHASED AND INTERCHANGE POWER FUEL COST</u>	<u>FUEL COST RECOVERED INTERSYSTEM SALES</u>	<u>TOTAL FUEL COST</u>
	\$	\$	\$	\$
Apr-01	62,947,727	7,430,519	(8,385,365)	61,992,881
May-01	64,951,178	4,474,081	(7,847,879)	61,577,380
Jun-01	71,938,645	2,612,245	(9,260,338)	65,290,552
Jul-01	82,975,534	5,048,927	(14,658,153)	73,366,308
Aug-01	93,983,429	8,902,591	(14,960,816)	87,925,204
Sep-01	70,488,829	776,172	(8,032,707)	63,232,294
Oct-01	63,818,995	1,636,105	(9,669,282)	55,785,818
Nov-01	53,886,467	2,820,652	(5,253,624)	51,453,495
Dec-01	56,983,799	1,582,002	(3,959,732)	54,606,069
Jan-02	62,442,244	2,498,942	(6,950,059)	57,991,127
Feb-02	55,750,250	2,954,792	(6,079,351)	52,625,691
Mar-02	68,298,668	4,343,579	(10,803,530)	61,838,717
Total	808,465,765	45,080,607	(105,860,836)	747,685,536

## AUDIT EXHIBIT F

DUKE POWER COMPANY  
FACTOR COMPUTATION  
APRIL 2001 - MARCH 2002

<u>MONTH</u>	<u>TOTAL FUEL</u> <u>COSTS</u> \$	<u>TOTAL SYSTEM</u> <u>SALES EXCLUDING</u> <u>INTERSYSTEM</u> SALES KWH	<u>FUEL COST</u> <u>PER KWH</u> SALES \$/KWH	<u>BASE COST</u> <u>PER KWH</u> <u>INCLUDED IN</u> RATES \$/KWH	<u>FUEL</u> <u>ADJUSTMENTS</u> <u>PER KWH</u> \$/KWH
Apr-01	61,992,881	6,052,370,000	0.010243	0.009500	0.000743
May-01	61,577,380	5,716,693,000	0.010772	0.009500	0.001272
Jun-01	65,290,552	6,236,583,000	0.010469	0.009500	0.000969
Jul-01	73,366,308	6,730,695,000	0.010900	0.009500	0.001400
Aug-01	87,925,204	7,316,466,000	0.012017	0.009500	0.002517
Sep-01	63,232,294	6,860,542,000	0.009217	0.009500	(0.000283)
Oct-01	55,785,818	5,744,684,000	0.009711	0.009500	0.000211
Nov-01	51,453,495	5,612,567,000	0.009168	0.009500	(0.000332)
Dec-01	54,606,069	5,501,707,000	0.009925	0.009500	0.000425
Jan-02	57,991,127	6,395,497,000	0.009067	0.009500	(0.000433)
Feb-02	52,625,691	6,075,867,000	0.008661	0.009500	(0.000839)
Mar-02	61,838,717	5,648,271,000	0.010948	0.009500	0.001448

Duke Power Company  
S.C. Retail Comparison of Fuel Revenues & Expenses  
April 2001 - May 2002

Description	ACTUAL					
	Apr-01	May-01	Jun-01	Jul-01	Aug-01	Sep-01
Fossil Fuel	52,348,392	52,045,313	56,979,343	67,369,208	77,948,821	56,569,390
Nuclear Fuel	10,599,335	12,905,865	14,959,302	15,606,326	16,034,608	13,919,439
Purchased Power (1)	7,430,519	4,474,081	2,612,245	5,048,927	8,902,591	776,172
Subtotal	70,378,246	69,425,259	74,550,890	88,024,461	102,886,020	71,265,001
Less: Fuel Cost Recovered through Intersystem Sales	8,385,365	7,847,879	9,260,338	14,658,153	14,960,816	8,032,707
Fuel Cost	61,992,881	61,577,380	65,290,552	73,366,308	87,925,204	63,232,294
Total System KWH Sales Excluding Intersystem Sales (000's)	6,052,370	5,716,693	6,236,583	6,730,695	7,316,466	6,860,542
\$/KWH Sales	0.010243	0.010772	0.010469	0.010900	0.012017	0.009217
Less: Base Sales (\$/KWH)	0.009500	0.009500	0.009500	0.009500	0.009500	0.009500
Fuel Adjustment Per KWH	0.000743	0.001272	0.000969	0.001400	0.002517	(0.000283)
S.C. KWH Sales (000's)	1,720,540	1,687,156	1,772,324	1,908,368	2,046,018	1,908,953
(Over)/Under Recovery	1,278,361	2,146,062	1,717,382	2,671,715	5,149,827	(540,234)
Cumulative (Over)/Under Recovery-March 2001	(20,367,528)					
Cumulative (Over)/Under Recovery this Period	(19,089,167)	(16,943,105)	(15,225,723)	(12,554,008)	(7,404,181)	(7,944,415)

Notes:

(1) Staff's Purchased Power figures for June 2001 and October 2001 differ from the Company's figures. (November 2001 also slightly differed, but when compared to the Company's rounded figure, there was no difference to note.) Staff's figures, per Staff's report, reflect calculation adjustments made to Purchased Power Costs for the aforementioned months, based on Staff's review of Purchased Power system operations reports and invoices.

It should be noted that in the Staff's report, after the adjustments to Purchased Power Costs and after the fuel cost per KWH rounding differences in April and May 2001, the resultant (over)/under-recovery monthly amounts differ from the Company's figures for the months of April 2001, May 2001, June 2001 and October 2001. As a result, on a S.C. jurisdictional basis and based on the Company's filed testimony, the difference between the Company's and the Staff's cumulative over-recovery balances as of actual March 2002 is \$ 28,583, and the difference as of estimated May 2002 is \$ 28,161 (the difference between the respective cumulative differences of \$ 422 is based on rounding).

Duke Power Company  
S.C. Retail Comparison of Fuel Revenues & Expenses  
April 2001 - May 2002

Description	ACTUAL					ESTIMATED				
	Oct-01	Nov-01	Dec-01	Jan-02	Feb-02	Mar-02	Apr-02	May-02		
Fossil Fuel	48,753,647	40,480,686	42,952,260	47,128,026	42,350,967	57,010,951	43,727,000	52,104,000		
Nuclear Fuel	15,065,348	13,405,781	14,031,539	15,314,218	13,399,283	11,287,717	12,976,000	13,433,000		
Purchased Power (1)	1,636,105	2,820,652	1,582,002	2,498,942	2,954,792	4,343,579	3,353,000	3,353,000		
Subtotal	65,455,100	56,707,119	58,565,801	64,941,186	58,705,042	72,642,247	60,056,000	68,890,000		
Less: Fuel Cost Recovered through Intersystem Sales	9,669,282	5,253,624	3,959,732	6,950,059	6,079,351	10,803,530	6,015,000	6,015,000		
Fuel Cost	55,785,818	51,453,495	54,606,069	57,991,127	52,625,691	61,838,717	54,041,000	62,875,000		
Total System KWH Sales Excluding Intersystem Sales (000's)	5,744,684	5,612,567	5,501,707	6,395,497	6,075,867	5,648,271	5,545,243	5,619,853		
\$/KWH Sales	0.009711	0.009168	0.009925	0.009067	0.008661	0.010948	0.009745	0.011188		
Less: Base Sales (\$/KWH)	0.009500	0.009500	0.009500	0.009500	0.009500	0.009500	0.009500	0.009500		
Fuel Adjustment Per KWH	0.000211	(0.000332)	0.000425	(0.000433)	(0.000839)	0.001448	0.000245	0.001688		
S.C. KWH Sales (000's)	1,694,424	1,622,115	1,548,871	1,748,234	1,719,958	1,533,686	1,655,175	1,672,429		
(Over)/Under Recovery	357,523	(538,542)	658,270	(756,985)	(1,443,045)	2,220,777	405,518	2,823,060		
Cumulative (Over)/Under Recovery - 9/01 (p. 1 of 2)	(7,944,415)									
Cumulative (Over)/Under Recovery this Period	(7,586,892)	(8,125,434)	(7,467,164)	(8,224,149)	(9,667,194)	(7,446,417)	(7,040,899)	(4,217,839)		

(Explanation for Note (1) is on Page 1 of 2.)

**REPORT OF THE UTILITIES DEPARTMENT  
OF  
THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA**

**DOCKET NO. 2002-3-E**

**DUKE POWER**

**REPORT OF UTILITIES DEPARTMENT**  
**THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA**  
**DOCKET NO. 2002-3-E**  
**DUKE POWER**

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# **REPORT OF UTILITIES DEPARTMENT**

## **PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA**

**DOCKET NO. 2002-3-E**

### **DUKE POWER**

#### **REPORT OF FUEL ADJUSTMENT ANALYSIS**

#### **SCOPE OF EXAMINATION**

The Commission's Utilities Department Staff analyzed the Company's procedures and practices pertaining to its fuel operation. Staff's examination consisted of the following:

- 1) Review of the Company's monthly fuel reports including:
  - a) Power Plant Performance Data Reports
  - b) Major Unit Outage Reports
  - c) Generation Mix
  - d) Generation Statistics
  - e) Retail Comparison of MWH Sales
  - f) Retail Comparison of Fuel Costs
- 2) Review of the Company's currently approved Adjustment for Fuel Costs tariff.
- 3) History of Cumulative Recovery Account.
- 4) Calculation of fuel costs to be included in the base rates for June 2002 through May 2003.

#### **REVIEW OF COMPANY'S MONTHLY FUEL REPORTS**

The Company files with this Commission monthly reports that include power plant performance data, major unit outages, generation mix, and other reports that provide the Staff pertinent data on which to evaluate the Company's fuel operating expenses.

Selected information from the Power Plant Performance Data Reports for nuclear and fossil plants is shown on **Exhibit No. 1**. It includes a listing of capacity factors and equivalent availability factors for each unit by month for the period and also includes the yearly capacity factors (1998-2001) and the lifetime (cumulative) capacity factor of the nuclear units. These factors are expressed as a percentage. This percentage figure can be a useful index when attempting to locate or identify a particular problem or unusual occurrence.

Pursuant to S.C. Code Ann. Section 58-27-865 (Supp. 2001) certain criteria are established for review of a utility's effort to minimize fuel expenses. In evaluating a utility's fuel costs under this section, it is necessary to examine and determine whether the utility has made every reasonable effort to minimize fuel costs associated with the operation of its nuclear generation system while "giving due regard to reliability of service, economical generation mix, generating experience of comparable facilities and minimization of the total cost of providing service."

The Staff's Nuclear Unit Outage Report considers each outage experienced by unit, giving the inclusive dates of the outage, days out of service, type of outage (Scheduled or Forced), the reason for the outage, and the corrective action taken. This information covers the period, April 2001 through March 2002, which is being considered in this proceeding and is shown in **Exhibit No. 2A**. Staff compiled this data through review of Company documents, NRC documents, and interviews with Company personnel. The Company's Nuclear Units performed very well during this period achieving an actual average capacity factor in excess of 93 percent.

The Staff's Fossil Unit Outage Report is a listing of plants by unit, duration of outage (greater than 100 hours), reason for down time, and corrective action taken to return the unit to service. The information specifically reviewed for this proceeding is for the months of April 2001 through March 2002 and is included in **Exhibit No. 2B**. These Units' Availability Factors were in the 95 plus percentile for the greater portion of this period.

Staff reviewed and compiled a percentage Generation Mix statistic sheet for the Company's fossil, nuclear and hydraulic plants for April 2001 through March 2002. The fossil generation ranged from a high of 47% to a low 35%. The nuclear generation ranged from a high of 65% to a low of 53%. The percentage of generation by hydro ranged from a high of 1% to a low of 0%. This information is included in **Exhibit No. 3**.

The Staff also collected and reviewed certain Generation Statistics of Major Plants for the 12 months ending March 31, 2002. This data is presented on **Exhibit No. 4**. This Exhibit shows the Company's major plants by name, type of fuel used, fuel cost in cents per kilowatt-hour to operate and total megawatt-hours generated for the period. The nuclear fueled Catawba Station was lowest in cost at 0.40 cents per kilowatt-hour. The highest amount of generation of 20,143,759 megawatt-hours was produced at the Oconee Nuclear Station.

Utilities Department **Exhibit No. 5** shows a comparison of the Company's original retail megawatt-hour (MWH) estimated sales to the actual sales for the period from April 2001 through March 2002. The original projections ranged from an over-estimate of 3.62% in April 2001 to an over-estimate of 20.58% in December 2001 with a total over-estimate of 10.55% for the period.

Utilities Department **Exhibit No. 6** shows a comparison of the Company's original fuel cost projections to the costs actually experienced for the months of April 2001 through March 2002. The original projections ranged from an under-estimate of 7.33% for August 2001 to an over-estimate of 24.59% for November 2001. The difference between actual and original projection of these fuel costs is further delineated graphically on Utilities Department **Exhibit No. 7**.

#### **REVIEW OF THE COMPANY'S CURRENTLY APPROVED RETAIL ADJUSTMENT FOR FUEL COSTS**

Staff has reviewed the Company's currently approved Retail Adjustment for Fuel Costs and found it to continue to operate properly and therefore Staff does not recommend any modifications at this time. **Exhibit No. 8** is a copy of the Company's currently approved Adjustment for Fuel Costs tariff.

#### **HISTORY OF THE CUMULATIVE RECOVERY ACCOUNT**

**Exhibit No. 9** is a history of the cumulative recovery account balances from inception in 1979 to March 2002.

#### **CALCULATION OF BASE RATE FUEL COST COMPONENT FOR JUNE 2002 THROUGH MAY 2003.**

Utilizing the currently projected sales and fuel cost figures for the period June 2002 through May 2003 and including the projected over-recovery balance of \$4,217,839 in the cumulative recovery account through May 2002 (See Audit Exhibit G), the average fuel expense is estimated to be 1.0290 cents per kilowatt-hour. Applying this fuel factor to the period would create an ending period estimated \$2,043 over-collection in the cumulative recovery account.

The Commission has consistently expressed its expectation that the Company exercise all reasonable prudence and efficiency in its fuel purchasing practices and aggressively control the operation and maintenance of its production facilities to assure the lowest fuel costs possible. Also, the Commission has directed the Staff to monitor the Company's plant operations and fuel purchasing to insure that any inefficient or negligent practice is brought to the Commission's attention.

**Exhibit No. 10** is a table of Projections of the Cumulative Recovery Account for various fuel base levels for the twelve month period ending May 2003. Also indicated in the table are the projected results using the current fuel factor base component of 0.9500 cents per kilowatt-hour, which is also the Company's proposed factor.

# DUKE POWER

## POWER PLANT PERFORMANCE DATA REPORT CAPACITY FACTOR (%)

UNIT	MW RATING	LIFE TIME	YEAR 1998	YEAR 1999	YEAR 2000	YEAR 2001	APR 2001	MAY 2001	JUN 2001	JUL 2001	AUG 2001	SEP 2001	OCT 2001	NOV 2001	DEC 2001	JAN 2002	FEB 2002	MAR 2002
CATAWBA 1	1129	79	90	92	90	101	103	102	102	101	102	102	102	103	103	103	103	103
CATAWBA 2	1129	79	88	90	91	87	103	103	102	102	102	102	42	103	53	104	104	103
MCGUIRE 1	1100	71	92	89	104	90	42	104	103	102	101	102	104	105	105	105	105	93
MCGUIRE 2	1100	79	103	89	87	103	105	104	103	92	101	102	103	104	103	105	81	8
OCONEE 1	846	73	81	84	85	94	102	91	102	101	100	83	101	102	102	103	103	73
OCONEE 2	846	75	76	84	101	90	85	0	101	101	100	90	98	102	102	102	102	102
OCONEE 3	846	75	78	99	88	73	21	102	101	101	100	98	101	30	56	102	102	103
TOTAL	6996	76	88	90	92	92	81	89	102	100	101	88	89	94	89	104	100	83

## EQUIVALENT AVAILABILITY FACTOR

UNIT	MW RATING	APR 2001	MAY 2001	JUN 2001	JUL 2001	AUG 2001	SEP 2001	OCT 2001	NOV 2001	DEC 2001	JAN 2002	FEB 2002	MAR 2002
BELEWS CREEK 1	1120	100	88	99	94	88	95	38	6	100	100	99	100
BELEWS CREEK 2	1120	68	100	84	100	94	99	67	85	96	99	100	100
CLIFFSIDE 5	562	20	35	95	98	100	91	98	92	100	100	4	0
MARSHALL 3	660	93	65	99	100	99	69	99	90	81	100	99	68
MARSHALL 4	660	0	10	98	100	97	67	95	100	100	100	99	99
TOTAL	4122	63	68	94	98	94	87	73	68	96	100	86	81
CATAWBA 1	1129	99	99	99	99	99	99	100	100	100	100	100	100
CATAWBA 2	1129	100	100	99	99	99	45	25	100	52	100	100	100
MCGUIRE 1	1100	40	98	98	95	95	95	99	99	99	100	100	88
MCGUIRE 2	1100	99	99	99	87	96	96	99	99	98	100	77	10
OCONEE 1	846	100	90	100	99	99	83	100	100	99	100	100	71
OCONEE 2	846	83	0	99	99	99	89	97	99	100	100	100	100
OCONEE 3	846	21	100	99	99	99	97	100	30	56	100	100	100
TOTAL	6996	77	84	99	97	98	86	88	90	86	100	97	81

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UTILITIES DEPARTMENT  
EXHIBIT NO. 1

**DUKE POWER**  
**NUCLEAR UNIT OUTAGE REPORT**  
 April 1, 2001 – March 31, 2002

<u>UNIT</u>	<u>DATE OF OUTAGE</u>	<u>DAYS/TYPE*</u>	<u>REASON FOR OUTAGE AND CORRECTIVE ACTION</u>
OCONEE 1	05/21/01 – 05/24/01	2.70/F	Electrical Generator seal oil tank level control failure.
	09/12/01 – 09/16/01	3.77/F	Generator Bus disconnect switch failure.
	03/23/02 – 03/31/02	8.83/S	Refueling Outage. Continuing into April 2002.
OCONEE 2	04/26/01 – 05/31/01	35.53/S	Refueling Outage.
	09/29/01 – 10/01/01	2.50/S	Preventive maintenance repairs to Generator Phase Bus disconnects.
	04/01/01 – 04/24/01	23.16/S	Continuation from prior outage begun 2/19/01 for leaks found on reactor vessel head control rod drive (CRD) mechanism due to small cracks in CRD nozzle welds.
MCGUIRE 1	11/10/01 – 12/14/01	34.02/S	Refueling Outage extended due to Reactor Vessel Head Nozzle repairs.
	04/01/01 – 04/17/01	16.20/S	Continuation of Refueling Outage from 03/09/01 for a total of 38 days. 10 year In-Service-Inspection (ISI) included in outage.
	03/04/02 – 03/06/02	2.85/F	Unit trip when electrical fuse failed causing SG regulating valve failure.
MCGUIRE 2	07/16/01 – 07/18/01	2.55/F	Personnel performing routine maintenance on Main Steam Lines pressure instrumentation isolated the wrong steam line pressure transmitter resulting in the reactor trip.
	02/22/02 – 03/27/02	32.31/S	Refueling outage extended due to Rx Vessel CRD tube leak.

**DUKE POWER**  
**NUCLEAR UNIT OUTAGE REPORT**  
 April 1, 2001 – March 31, 2002

<u>UNIT</u>	<u>DATE OF OUTAGE</u>	<u>DAYS/TYPE*</u>	<u>REASON FOR OUTAGE AND CORRECTIVE ACTION</u>
CATAWBA 1	NONE		
CATAWBA 2	09/15/01 – 10/23/01	37.73/S	Refueling Outage extended due to miscellaneous emerging work activities as well as plant security concerns.
	12/07/01 – 12/22/01	14.38/F	Turbine tripped due to failure of a Reactor Coolant Pump motor.

TYPE\* F- Forced    S- Scheduled

**DUKE POWER**  
**MAJOR FOSSIL UNIT OUTAGE REPORT**  
 (100 HRS OR GREATER DURATION)  
 APRIL 1, 2001 – MARCH 31, 2002

DOCKET NO. 2002-3-E  
 UTILITIES DEPARTMENT  
 EXHIBIT NO. 2B

<u>MONTH</u>	<u>UNIT</u>	<u>HRS/TYPE*</u>	<u>REASON FOR OUTAGE AND CORRECTIVE ACTION</u>
APR 01	Belews 2	186/S	Boiler inspections.
	Cliffside 5	575/S	Boiler inspections.
	Marshall 4	719/S	Boiler Overhaul.
MAY 01	Cliffside 5	446/S	Boiler Inspections.
	Marshall 3	232/S	Boiler Inspections.
	Marshall 4	325/S	Boiler Overhaul.
	Marshall 4	343/F	Furnace Wall tube leak.
JUN 01	NONE		
JUL 01	NONE		
AUG 01	NONE		
SEP 01	Marshall 3	201/S	Boiler overhaul.
	Marshall 4	110/F	First Superheater tube leak.
OCT 01	Belews 1	448/F	Generator main leads.
	Belews 2	203/F	Brushes and brush rigging /First Reheater tube leak.
NOV 01	Belews 1	672/F	Generator main leads/Boiler explosion or implosion.
DEC 01	Marshall 3	141/F	Furnace wall tube leak/First superheater tube leak.
JAN 02	NONE		
FEB 02	Cliffside 5	648/S	Major turbine overhaul.
MAR 02	Cliffside 5	744/S	Major turbine overhaul.
	Marshall 3	213/S	Minor Boiler overhaul.

TYPE\* F --- Forced S - Scheduled

**DUKE POWER**  
**NET GENERATION MIX**  
**APRIL 1, 2001 - MARCH 31, 2002**

<u>MONTH-YEAR</u>	<u>PERCENTAGE</u>		
	<u>FOSSIL</u>	<u>NUCLEAR</u>	<u>HYDRO</u>
April-01	45	55	0
May-01	42	58	0
June-01	42	58	0
July-01	44	56	0
August-01	47	53	0
September-01	44	56	0
October-01	40	60	0
November-01	35	65	0
December-01	39	61	0
January-02	37	63	0
February-02	37	63	0
March-02	45	54	1

## DUKE POWER

### GENERATION STATISTICS OF MAJOR PLANTS

APRIL 1, 2001 –MARCH 31, 2002

PLANT	TYPE FUEL	AVERAGE FUEL COST (CENTS/KWH*)	GENERATION (MWH)
Catawba	Nuclear	0.40	18,726,941
Oconee	Nuclear	0.41	20,143,759
McGuire	Nuclear	0.41	18,326,872
Marshall	Coal	1.45	13,344,810
Cliffside 5	Coal	1.61	2,460,197
Belews Creek	Coal	1.42	15,551,072

(\*) The average fuel costs for coal-fired plants include oil cost for start-up and flame stabilization.

# DUKE POWER

## SOUTH CAROLINA RETAIL COMPARISON OF ESTIMATED TO ACTUAL ENERGY SALES

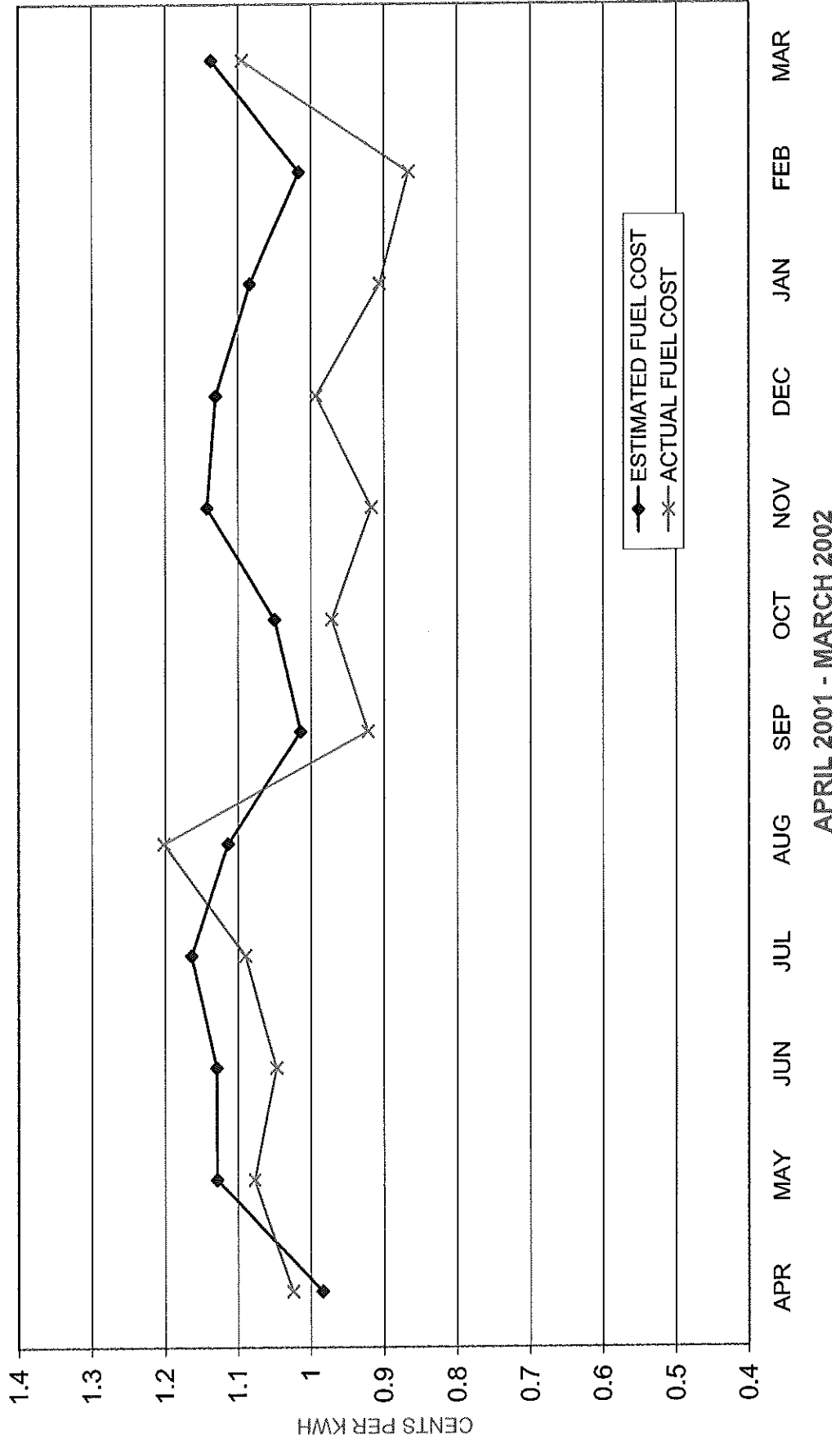
	2001	2002											TOTAL
	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	
[1] ESTIMATED SALES [MWH]	1,782,807	1,771,993	2,031,312	2,058,433	2,298,178	2,130,513	1,789,868	1,704,766	1,867,602	1,949,661	1,924,276	1,806,337	23,115,746
[2] ACTUAL SALES [MWH]	1,720,540	1,687,156	1,772,324	1,908,368	2,046,018	1,908,953	1,694,424	1,622,115	1,548,871	1,748,234	1,719,958	1,533,686	20,910,647
[3] AMOUNT DIFFERENCE [1]-[2]	62,267	84,837	258,988	150,065	252,160	221,560	95,444	82,651	318,731	201,427	204,318	272,651	2,205,099
[4] PERCENT DIFFERENCE [3]/[2]	3.62%	5.03%	14.61%	7.86%	12.32%	11.61%	5.63%	5.10%	20.58%	11.52%	11.88%	17.78%	10.55%

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UTILITIES DEPARTMENT  
EXHIBIT NO. 5

**DUKE POWER**  
**SOUTH CAROLINA RETAIL COMPARISON OF ESTIMATED TO ACTUAL FUEL COST**  
**(CENTS /KWH)**

	2001 <u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	2002 <u>JAN</u>	<u>FEB</u>	<u>MAR</u>
[1] ORIGINAL PROJECTION	0.9837	1.1282	1.1289	1.1637	1.1136	1.0143	1.0496	1.1422	1.1302	1.0837	1.0166	1.1363
[2] ACTUAL EXPERIENCE	1.0243	1.0771	1.0469	1.0900	1.2017	0.9217	0.9712	0.9168	0.9925	0.9067	0.8661	1.0948
[3] AMOUNT IN BASE	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
[4] VARIANCE FROM ACTUAL [1-2]/[2]	-3.96%	4.74%	7.83%	6.76%	-7.33%	10.05%	8.07%	24.59%	13.87%	19.52%	17.38%	3.79%

## DUKE POWER ESTIMATED TO ACTUAL FUEL COST



Duke Power

Electricity No. 4  
South Carolina Fifteenth Revised Leaf No. 50B  
Superseding South Carolina Fourteenth Revised Leaf No. 50B

## ADJUSTMENT FOR FUEL COSTS

### APPLICABILITY

This adjustment is applicable to and is a part of the Utility's South Carolina retail electric rate schedules.

The Public Service Commission has determined that the costs of Fuel in an amount to the nearest one ten-thousandth of a cent, as determined by the following formula, will be included in the base rates to the extent determined reasonable and proper by the Commission.

$$F = \frac{E}{S} + \frac{G}{S_1}$$

Where:

F = Fuel cost per kilowatt-hour included in base rate, rounded to the nearest one ten-thousandth of a cent.

E = Total Projected system Fuel costs:

- (A) Fuel consumed in the Utility's own plants and the Utility's share of fuel consumed in jointly owned or leased plants. The cost of fossil fuel shall include no items other than those listed in Account 151 of the Commission's Uniform System of Accounts for Public Utilities and Licensees plus SO<sub>2</sub> emission allowances recorded in Account 509. The cost of nuclear fuel shall be that as shown in Account 518 excluding rental payments on leased nuclear fuel and except that, if Account 518 also contains any expense for fossil fuel which has already been included in the cost of fossil fuel, it shall be deducted from this account.

Plus

- (B) Purchased power fuel costs and applicable SO<sub>2</sub> emission allowances such as those incurred in unit power and Limited Term power purchases where the fuel costs and applicable SO<sub>2</sub> emission allowances associated with energy purchased are identifiable and are identified in the billing statement.

Plus

- (C) Interchange power fuel costs and applicable SO<sub>2</sub> emission allowances such as Short Term, Economy and other where the energy is purchased on economic dispatch basis.

Energy receipts that do not involve money payments such as Diversity energy and payback of storage energy are not defined as purchased or interchange power relative to this fuel calculation.

Minus

- (D) The cost of fuel and applicable SO<sub>2</sub> emission allowances recovered through intersystem sales including the fuel costs and applicable SO<sub>2</sub> emission allowances related to economy energy sales and other energy sold on an economic dispatch basis.

Energy deliveries that do not involve billing transactions such as Diversity energy and payback of storage energy are not defined as sales relative to this fuel calculation.

S = Projected system kilowatt-hour sales excluding any intersystem sales.

G = Cumulative difference between jurisdictional fuel revenues billed and fuel expenses at the end of the month preceding the projected period utilized in E and S.

S<sub>1</sub> = Projected jurisdictional kilowatt-hour sales for the period covered by the fuel costs included in E.

The appropriate revenue-related tax factor is to be included in these calculations.

The fuel cost F as determined by SCPSC Order No. 2001-516 for the period June 2001 through May 2002 is 0.9500 cent per kilowatt-hour.

DUKE POWER

HISTORY OF CUMULATIVE RECOVERY ACCOUNT

<u>PERIOD ENDING</u>	<u>OVER (UNDER)\$</u>
May 1979 - Automatic Fuel Adjustment in Effect	
November-79	1,398,442
May-80	11,322,948
November-80	4,588,331
May-81	(5,760,983)
November-81	(13,061,000)
May-82	(14,533,577)
November-82	(4,314,612)
May-83	20,915,390
November-83	14,192,297
May-84	18,245,503
November-84	14,478,363
May-85	2,551,115
November-85	(553,465)
May-86	(1,318,767)
November-86	(29,609,992)
May-87	(27,241,846)
November-87	(29,329,168)
May-88	(9,373,768)
November-88	6,544,914
May-89	6,067,739
November-89	11,372,399
May-90	15,421,968
November-90	2,939,303
May-91	17,068,483
November-91	21,265,000
May-92	21,080,856
November-92	11,553,801
May-93	16,959,555
November-93	221,606
May-94	6,609,897
November-94	1,037,659
May-95	5,088,619
November-95	(377,507)
March-97	(13,299,613)
March-98	(1,956,794)
March-99	13,044,443
March-00	26,703,441
March-01	20,367,528
March-02	(7,446,417)

**DUKE POWER**  
**PROJECTIONS OF THE CUMULATIVE RECOVERY ACCOUNT**  
**FOR THE TWELVE MONTH PERIOD ENDING**  
**MAY 2003**

	FUEL BASE (Cents/Kwh)	PROJECTED CUMULATIVE OVER/(UNDER) RECOVERY (\$)
COMPANY PROPOSED	0.9000	(28,029,720)
	0.9500	(17,164,696)
	0.9750	(11,732,183)
	1.0000	(6,299,671)
	1.0100	(4,126,666)
	1.0200	(1,953,661)
	1.0250	(867,159)
	1.0280	(215,257)
	1.0289	(19,687)
	1.0290	2,043
	1.0291	23,773
	1.0300	219,344
	1.0350	1,305,846
	1.0400	2,392,349
	1.0500	4,565,354
	1.0600	6,738,358
	1.0700	8,911,363
	1.0750	9,997,866
	1.0800	11,084,368
	1.0900	13,257,373
	1.1000	15,430,378
	1.1500	26,295,403